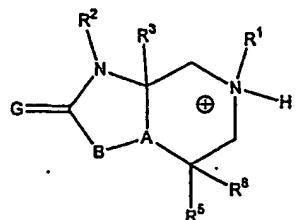


IN THE CLAIMS

Please amend the claims as follows:

1. (original) A compound of the formula:



or a pharmaceutically acceptable salt thereof, wherein:

A is CH or nitrogen;

B is $-\text{CH}_2-$, $-\text{CHF}-$, $-\text{CF}_2-$, NR_4 or O, with the proviso that when A is N, B is $-\text{CH}_2-$, $-\text{CHF}-$ or $-\text{CF}_2-$;

G is oxygen or $=\text{N}-\text{CN}$,

R_1 is hydrogen or C_{1-6} alkyl;

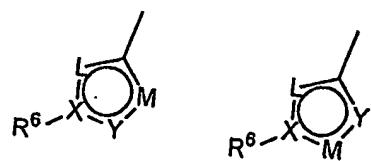
R_2 is hydrogen; C_{1-10} alkyl optionally substituted

with C_{1-6} alkoxy or halogen; aralkyl, a $-\text{CH}_2$ -heterocycle or a $-\text{CH}_2-\text{C}_5$ cycloalkyl ring each of which may be optionally substituted with one or more of halo, hydroxyl, C_{1-6} alkyl, C_{1-6} haloalky, C_{1-8} alkoxy, C_{1-6} haloalkoxy, C_{2-6} alkenyl, C_{2-6} haloalkenyl, C_{2-6} alkynyl or C_{2-6} haloalkynyl;

R_3 is hydrogen; a cyclic alkyl radical containing from 3-6 carbon atoms or a C_{1-C_6} alkyl;

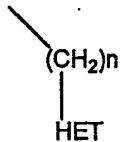
R_4 is hydrogen or lower alkyl;

R_5 is a 5-membered unsaturated heterocyclic ring having one of the following structures:



where L and M are independently O or N (or NH where the circumstances require) with the proviso that both of L and M cannot be O; Y is S, CH, O or N (or NH where the circumstances require); X is C or N; and

R₆ is lower alkyl; hydrogen; arylamino optionally substituted with one or more of halo, hydroxy, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl or C₂₋₆ haloalkynyl; aralkyl optionally substituted with one or more of halo, hydroxy, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl or C₂₋₆ haloalkynyl; or a group of formula:



wherein n is an integer in the range from 1 to 4 and HET is a heterocyclic group optionally substituted with one or more of halo, hydroxy, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl or C₂₋₆ haloalkynyl;

or R₅ may also be C₂-C₄-aralkyl, -CH₂-O-R₇ where R₇ is C₁₋₆ alkyl, C₂₋₆ alkenyl, C₂₋₆ alkynyl, C₂-C₄ aralkyl which groups may be optionally substituted with fluoro or hydroxy; and

R₈ is hydrogen or aryl (optionally substituted with one or more of halo, hydroxyl, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl or C₂₋₆ haloalkynyl);

with the proviso that when either R₃ or R₈ is not hydrogen, the other is hydrogen.

2. (original) A compound according to claim 1, in which

G is O;

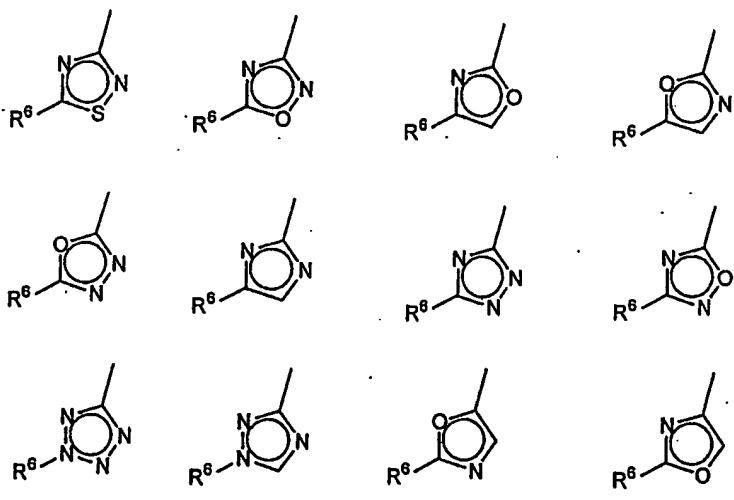
R₁ is H or lower alkyl;

R₂ is C₁₋₈ alkyl, -CH₂-aryl or a -CH₂-substituted heterocycle each of which may be optionally substituted with one or more of halo, hydroxy, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₈ alkoxy, C₁₋₆ haloalkoxy, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl or C₂₋₆ haloalkynyl;

R₃ is hydrogen, cyclobutyl, cyclopropyl, methyl, ethyl, isopropyl, butyl, sec-butyl;

R₄ is hydrogen;

R₅ is one of the following 5-membered unsaturated heterocyclic ring structures:



R₆ is methyl, aralkyl, arylamino, aralkyl substituted by one or more halo and having a methylene group linking the aryl to the unsaturated 5-membered ring, aralkyl substituted by one or more halo and having an ethylene group linking the aryl to the unsaturated 5-membered ring;

R₈ is hydrogen, phenyl or halo-substituted phenyl.

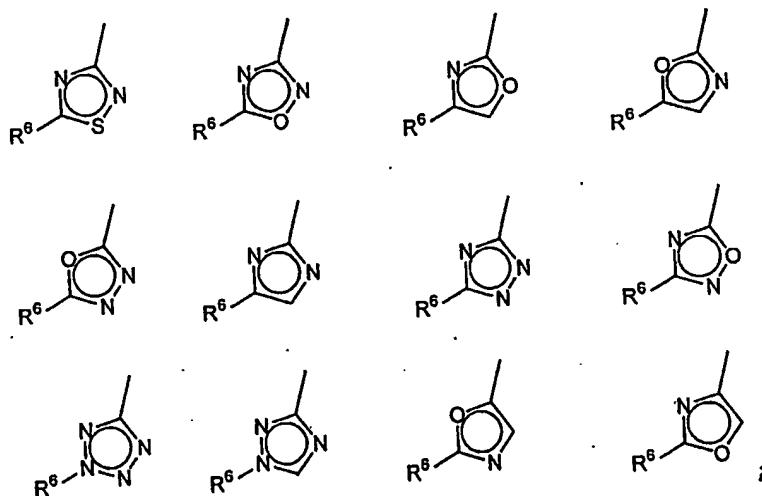
3. (original) A compound according to claim 2, wherein

R_1 is H;

R_2 is $-CH_2\text{-aryl}$ optionally substituted with one or more of halo, hydroxy, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-8} alkoxy, C_{1-6} haloalkoxy, C_{2-6} alkenyl, C_{2-6} haloalkenyl, C_{2-6} alkynyl or C_{2-6} haloalkynyl;

R_3 is hydrogen or cyclobutyl;

R_5 is one of the following 5-membered unsaturated heterocyclic ring structures:



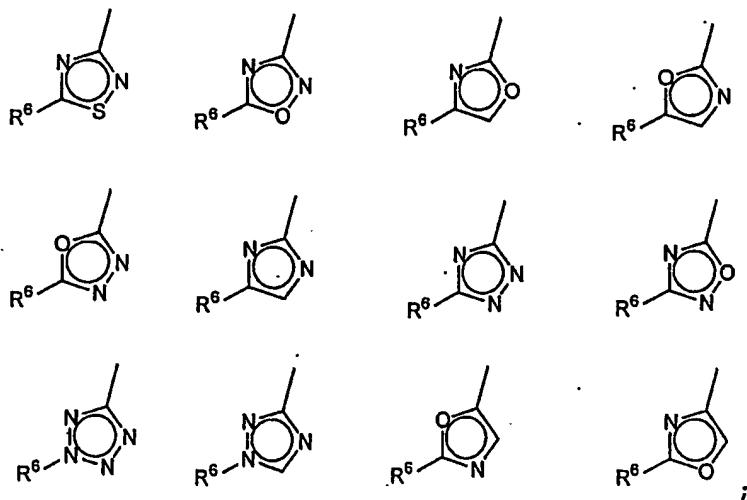
R_6 is phenyl, phenylamino substituted by one or more halo, phenylmethyl substituted by one or more halo, or phenethyl substituted by one or more halo;

R_8 is hydrogen or a fluoro-substituted phenyl.

4. (original) A compound according to claim 3, wherein
 R_2 is $-\text{CH}_2\text{C}_6\text{H}_5$ or $-\text{CH}_2\text{-heterocyclic aryl}$ each of which may be optionally substituted with one or more of halo, hydroxy, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-8} alkoxy, C_{1-6} haloalkoxy, C_{2-6} alkenyl, C_{2-6} haloalkenyl, C_{2-6} alkynyl or C_{2-6} haloalkynyl;

R_3 is H;

R_5 is one of the following 5-membered unsaturated heterocyclic ring structures:



R_6 is a meta chloro-substituted phenylamino, a meta chloro-substituted phenylmethyl or a meta chloro-substituted phenethyl;

R_8 is 3,5-difluorophenyl.

5. (original) A compound according to claim 1, wherein

A is CH;

B is -CH₂-;

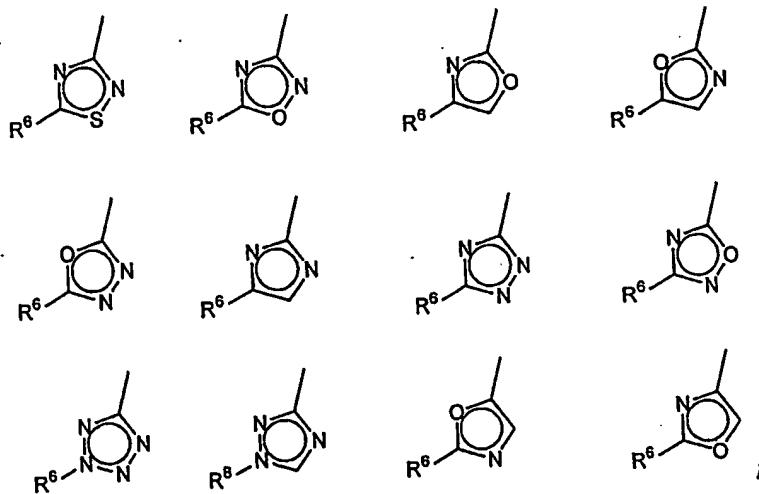
G is oxygen;

R₁ is hydrogen;

R₂ is C₁₋₁₀ alkyl or -CH₂-aryl (optionally substituted by one or more of halo, hydroxy, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₈ alkoxy, C₁₋₆ haloalkoxy, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl or C₂₋₆ haloalkynyl);

R₃ is cyclobutyl or H;

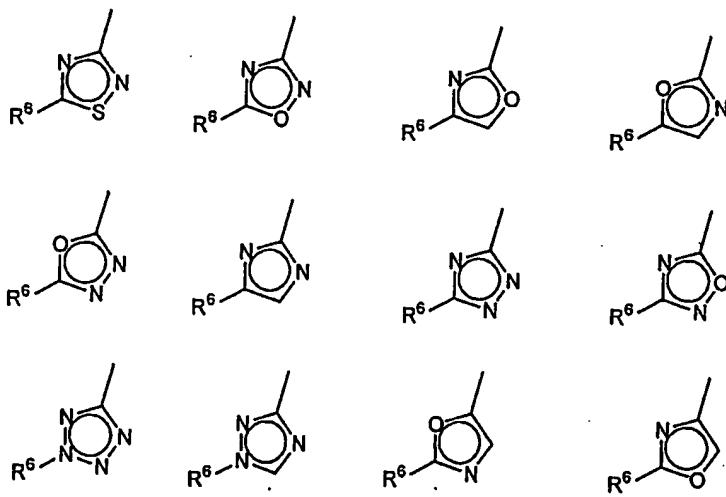
R₅ is one of the following 5 -membered unsaturated heterocyclic ring structures:



R₆ is methyl, aralkyl, arylamino, aralkyl substituted by one or more halo and having a methylene group linking the aryl to the unsaturated 5-membered ring, aralkyl substituted by one or more halo and having an ethylene group linking the aryl to the unsaturated 5-membered ring; and

R₈ is H or phenyl (optionally substituted with halo).

6. (original) A compound according to claim 1, in which A is CH;
 B is O;
 G is oxygen;
 R₁ is hydrogen;
 R₂ is C₁₋₁₀ alkyl, -CH₂-aryl (optionally substituted by one or more of halo, hydroxy, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₈ alkoxy, C₁₋₆ haloalkoxy, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl or C₂₋₆ haloalkynyl);
 R₃ is cyclobutyl or H;
 R₅ is -CH₂-O-CH₃, -CH₂-O-CH₂-CH₂-C₆H₅ or one of the following 5-membered unsaturated heterocyclic ring structures:



R₆ is methyl, aralkyl, arylamino, aralkyl substituted by one or more halo and having a methylene group linking the aryl to the unsaturated 5-membered ring, aralkyl substituted by one or more halo and having an ethylene group linking the aryl to the unsaturated 5-membered ring; and
 R₈ is H or phenyl (optionally substituted with halo).

7. (original) A compound according to claim 1, wherein .

A is CH; B is NH;

G is oxygen;

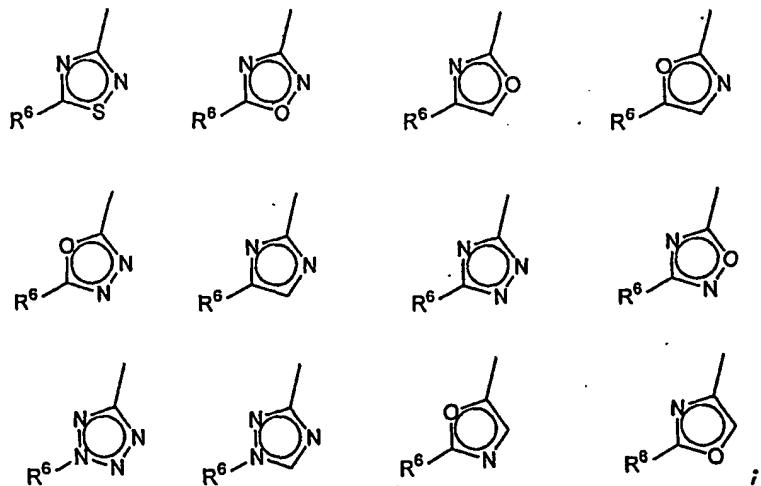
R₁ is hydrogen;

R₂ is C₁₋₁₀ alkyl, -CH₂-aryl, a -CH₂-heterocyclic group or a -CH₂-substituted C₅ cycloalkyl (optionally substituted by one or more of halo, hydroxy, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₈ alkoxy, C₁₋₆ haloalkoxy, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl or C₂₋₆ haloalkynyl);

R₃ is cyclobutyl or H;

R₄ is hydrogen;

R₅ is -CH₂-O-CH₃, -CH₂-O-CH₂-CH₂-C₆H₅ or one of the following 5-membered unsaturated heterocyclic ring structures:



R_6 is methyl, aralkyl, arylamino, aralkyl substituted by one or more halo and having a methylene group linking the aryl to the unsaturated 5-membered ring, aralkyl substituted by one or more halo and having an ethylene group linking the aryl to the unsaturated 5-membered ring; and

R_8 is H or phenyl (optionally substituted with halo).

8. (original) A compound according to claim 1, wherein

A is N;

B is $-CH_2-$;

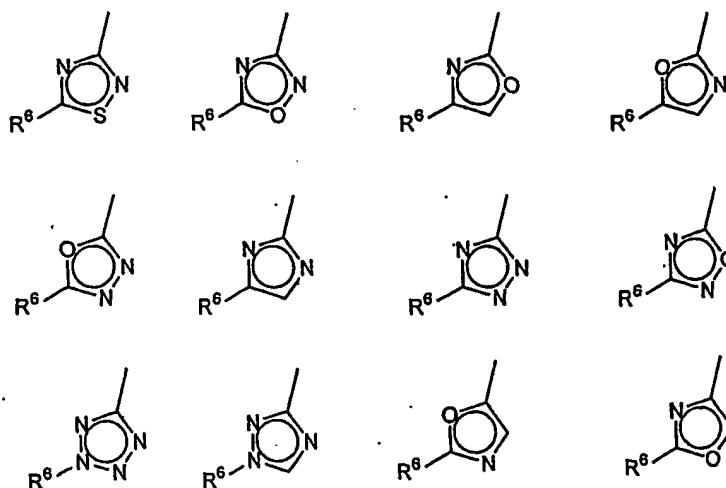
G is oxygen;

R_1 is hydrogen;

R_2 is C_{1-10} alkyl, $-CH_2$ -aryl, a $-CH_2$ -heterocyclic group or a $-CH_2$ -substituted C_5 cycloalkyl (optionally substituted one or more of halo, hydroxy, C_{1-6} alkyl, C_{1-6} haloalkyl, C_{1-8} alkoxy, C_{1-6} haloalkoxy, C_{2-6} alkenyl, C_{2-6} haloalkenyl, C_{2-6} alkynyl or C_{2-6} haloalkynyl);

R_3 is cyclobutyl or H;

R_5 is one of the following 5-membered unsaturated heterocyclic ring structures:



R_6 is methyl, aralkyl, arylamino, aralkyl substituted by one or more halo and having a methylene group linking the aryl to the unsaturated 5-membered ring, aralkyl, substituted by one or more halo and having an ethylene group linking the aryl to the unsaturated 5-membered ring; and

R_8 is H or phenyl (optionally substituted with halo).

9. (original) A compound according to claim 1, wherein

A is N;

B is $-CH_2-$;

G is oxygen;

R_1 is hydrogen;

R_2 is C_{1-10} alkyl $-CH_2$ -aryl, a $-CH_2$ -heterocyclic group or a $-CH_2$ -substituted C_5 cycloalkyl (optionally substituted by one or more of halo, hydroxy, C_{1-6} alkyl, C_{1-6} haloalky, C_{1-8} alkoxy, C_{1-6} haloalkoxy, C_{2-6} alkenyl, C_{2-6} haloalkenyl, C_{2-6} alkynyl or C_{2-6} haloalkynyl);

R_3 is cyclobutyl or H;

R_5 is $-CH_2-O-CH_3$; and

R_8 is H or phenyl (optionally substituted with halo).

10. (original) A compound according to claim 1, wherein

A is N;

B is -CH₂-;

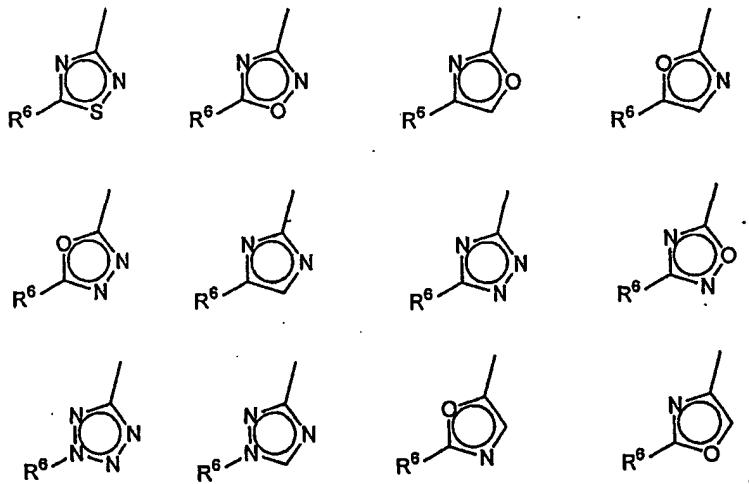
G is oxygen;

R₁ is hydrogen;

R₂ is C₁₋₁₀ alkyl, -CH₂-aryl or a -CH₂-heterocyclic group, (optionally substituted by one or more of halo, hydroxy, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₈ alkoxy, C₁₋₆ haloalkoxy, C₂₋₆ alkenyl, C₂₋₆ haloalkenyl, C₂₋₆ alkynyl or C₂₋₆ haloalkynyl);

R₃ is hydrogen or cyclobutyl;

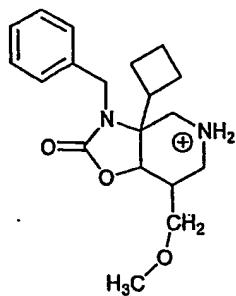
R₅ is one of the following 5-membered unsaturated heterocyclic ring structures:



R₆ is methyl, aralkyl, arylamino, aralkyl substituted by one or more halo and having a methylene group linking the aryl to the unsaturated 5-membered ring, aralkyl substituted by one or more halo and having an ethylene group linking the aryl to the unsaturated 5-membered ring; and

R₈ is phenyl, 3,5-difluorophenyl or H.

11. A compound according to claim 1, having the formula:



12. (currently amended) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claims 1 to 11.

13. (currently amended) A compound in accordance with ~~any one of~~ claims 1 to 11 for use as a medicament.

14. (currently amended) Use of a compound in accordance with claims 1-11 in the manufacture of a medicament for the treatment of disorders caused by the malfunction of the acetylcholine or muscarinic systems.

15. (original) The use of claim 14, wherein the disorder is Alzheimer's disease.

16. (currently amended) A method of treatment, prophylaxis and/or inhibition of disorders caused by the malfunction of the acetylcholine or muscarinic systems comprising the administration of a therapeutically effective amount of a compound as claimed in ~~any of~~ claims 1 to 11 to a subject in need thereof.

Respectfully submitted,
WELSH & KATZ, LTD.

Gerald T. Shekleton

Gerald T. Shekleton
Registration No. 27,466

Dated: June 5, 2006
WELSH & KATZ, LTD.
120 South Riverside Plaza
22nd Floor
Chicago, Illinois 60606-3912
Telephone: (312) 655-1500
Facsimile (312) 655-1501